

REMARKS

Claims 1-10 remain pending in the application. Claims 1-3, 5-7 and 10 have been amended. Reconsideration of the rejection and allowance of the pending application in view of the following remarks are respectfully requested.

As an initial matter, Applicants would like to thank the Examiner for acknowledging Applicants' claim for foreign priority, and receipt of the certified copy of the priority document. Applicants also thank the Examiner for accepting the drawings filed on February 28, 2005, and for considering all of the documents cited in the Information Disclosure Statement filed on May 24, 2005.

In the Office Action, the Examiner rejected claims 1 and 3-5 under 35 U.S.C. §102(b) as being anticipated by Maeda et al. (U.S. Patent No. 6,169,282). Applicants respectfully traverse the rejection for at least the following reasons.

In the specification of the present application, Applicants disclose an embodiment of a next process-determining method that includes, inter alia, digitizing a sample object into digital sample data, compressing the digital sample data into compressed digital sample data having a predetermined data format, and calculating a difference data amount between a data amount of the compressed digital sample data and a data amount of reference data formed by digitizing and compressing a reference sample object in the same manner as the sample object is processed.

Maeda is directed to a pattern inspection method. According to the method, a digital signal is subject to dark level correction, fluctuation correction, and shading correction in a preliminary processor 40, and then filtered by a Gaussian filter, mean

value filter, or edge emphasis filter so as to improve image quality. See col. 10, line 60 to col. 11, line 4.

In the Office Action, the Examiner asserts that Maeda's filtering corresponds to Applicants' claimed sample data compression. Applicants respectfully disagree.

Applicants respectfully submit that the filtering process disclosed by Maeda does not compress, or reduce the size of, the digital signal subjected to the filtering. Specifically, Applicants submit that the filtering process of Maeda merely changes pixel color data (corresponding to noise) to be similar to color data of surrounding pixels without changing the data amount. Applicants submit that A/D converter 39 and preliminary processor 40 of Maeda (see, for example, Figure 18) do not convert the digital signal to a compressed data format, such as, for example, JPEG or GIF. Thus, Applicants respectfully submit that Maeda does not disclose compressing digital sample data into compressed digital sample data having a predetermined data format, as recited in independent claim 1.

In the Office Action, the Examiner also asserts that col. 11, line 22 to col. 13, line 23 of Maeda discloses steps that correspond to Applicants' claimed difference data amount calculation. Applicants respectfully disagree.

Applicants submit that in col. 11, line 22 to col. 13, line 23, Maeda merely discloses that a detected image and a comparison image are positioned, that the pixels of the detected image and the comparison image are compared, and that it is determined whether a value is within a predetermined threshold. If the value is within the threshold, pixels of the detected image are determined to correspond to a non-defective object, whereas pixels of the detected image are determined to correspond to

a defective object if the value is outside the threshold. Applicants submit that Maeda does not disclose comparing the data amount of the detected image and the data amount of the comparison image to calculate a difference amount. Thus, Applicants respectfully submit that Maeda does not disclose calculating a difference data amount between a data amount of a compressed digital sample data and a data amount of reference data, as recited in independent claim 1.

Applicants respectfully submit that Maeda exhibits similar shortcomings to those of Japanese Patent Publication No. HEI 11-242746, which is discussed in paragraph 0003 of Applicants' present application. That is, a complex filtering process is required to achieve accurate detection of defective parts. On the other hand, the embodiments of the present invention disclosed by Applicants are capable of deciding a next process by determining to which value range a difference amount between compressed sample data and compressed reference data belong to. This makes it possible to quickly decide the next process without repeating the filtering process a plurality of times.

For at least these reasons, Applicants respectfully submit that Maeda fails to anticipate the invention of Applicants' independent claim 1. Thus Applicants respectfully request that the Examiner withdraw the 35 U.S.C. § 102(b) rejection and allow claim 1.

Dependent claims 3-5 are also submitted to be in condition for allowance for at least the reasons set forth above with respect to independent claim 1.

In the Office Action, the Examiner rejects claims 2 and 6-10 under 35 U.S.C. § 103(a) as being unpatentable over Maeda in view of Streater (U.S. Patent No. 5,831,677). Applicants respectfully traverse the rejection for at least the following reasons.

As discussed above, Applicants respectfully submit that Maeda fails to disclose or suggest compressing image data into compressed image data having a predetermined format, and calculating a difference data amount between a data amount of the compressed image data and a data amount of reference data, as recited in independent claim 6. Similarly, Applicants submit that Maeda fails to disclose or suggest a data processor that compresses image data according to a predetermined data format, and a calculator that calculates a difference data amount between a data amount of the image data compressed by the data processor and a data amount of reference data, as recited in independent claim 7.

Further, Applicants respectfully submit that Streater fails to disclose (or even suggest) that which is lacking in Maeda. Thus, Applicants submit that Streater fails to overcome the above-noted deficiencies of Maeda, with respect to independent claims 1, 6 and 7.

For at least these reasons, Applicants submit that the 35 U.S.C. § 103(a) rejection of independent claim 6 and 7, along with dependent claims 2 and 8-10 is improper, and respectfully request that the Examiner withdraw the rejection and allow these claims.

Based on the above, it is respectfully submitted that this application is now in condition for allowance, and a Notice of Allowance is respectfully requested.

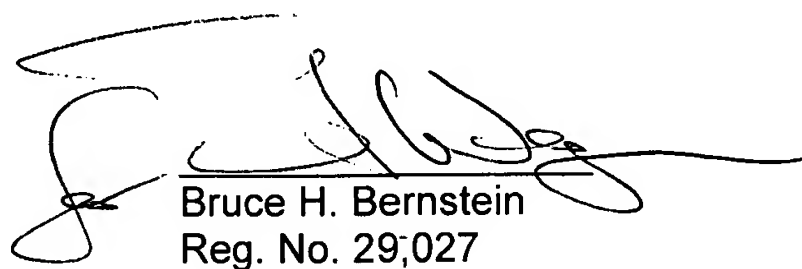
SUMMARY AND CONCLUSION

Entry and consideration of the present amendment, reconsideration of the outstanding Office Action, and allowance of the present application and all of the claims therein are respectfully requested and now believed to be appropriate. Applicants have made a sincere effort to place the present invention in condition for allowance and believe that they have now done so.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions or comments regarding this response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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